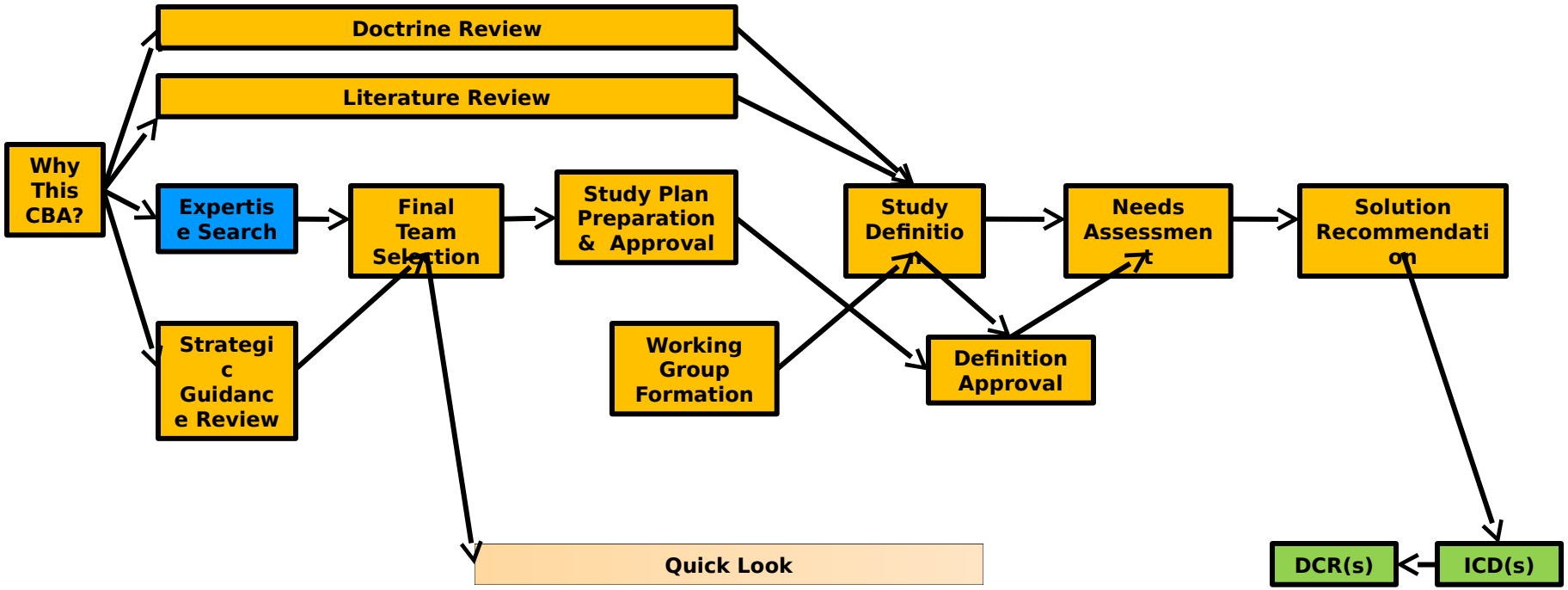
CLR 250, Lesson #3: CBA Team Building and Planning Learning Objectives

- Terminal Learning Objective (TLO)
  - By the conclusion of this lesson you will be able to choose appropriate members for your CBA Core Team, your CBA Working Group Team, and plan the conduct of your CBA effort.
- Enabling Learning Objectives (ELOs)
  1. Recognize the different types of relevant expertise necessary for a CBA.
  2. Identify considerations for selection of CBA Core and Working Group Teams
  3. Recognize possible CBA pitfalls prior to planning
  4. Recognize the six major areas and basic questions to ask for ensuring a CBA is of adequate scope
  5. Explain the tradeoffs associated with low versus high CBA study rigor
  6. Recognize the elements and purpose of each task contained in a CBA study

Expertise Search

Concept Preparation (if it was commissioned) or Review of Available CONOPs



Identifying Relevant Expertise to Conduct CBAs:

- Adversary Expertise
- Analytical Ability
- Bureaucratic Agility
- Communications Ability
- Doctrinal Knowledge

- Note: take each bullet above and create a tab. When the chart for each tab appears, immediately begin the audio narrative below in the notes section:

Identifying Relevant Expertise to Conduct CBAs (continued):

- Study Design
- Study Management
- Cost Estimation
- Technical knowledge
- Policy knowledge
    - Note: take each bullet above and create a tab. When the chart for each tab appears, immediately begin the audio narrative below in the notes section:

Identifying Relevant Expertise (continued):

- Additional Sources Valuable to CBAs:
  - Government Organizations
  - Contractors
  - Federally Funded Research and Development Centers (FFRDCs)
  - University Affiliated Research Centers (UARCs)
  - Informal advisors who are neither in the government nor on contract

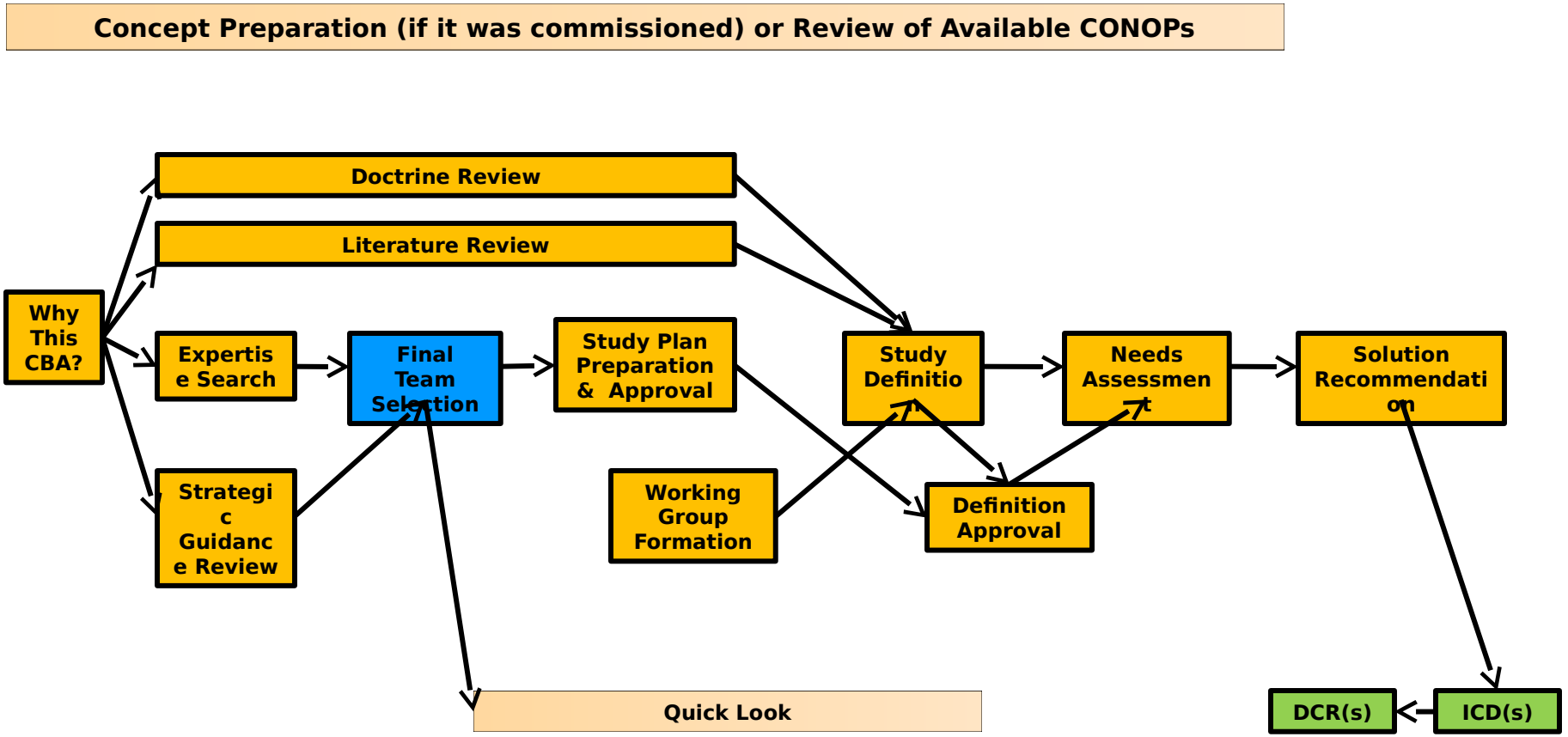
  - Note: take each sub-bullet above and create a tab. When the chart for each tab appears, immediately begin the audio narrative below in the notes section:

Knowledge Review

- Please select correct answer.
  - Which of the following is not a valid expertise resource?

A. Informal advisors, mentors, and acquaintances
B. Contractors
C. Government officials
D. All are valid resources

Final Team Selection



Final Team Selection

- “Highly Recommended” Advice to the CBA Study Team Manager:
  - Form the “Core Team” as soon as practical.
  - Know the difference between “Core Team” and “Working Group Team”

  - Note: take each sub-bullet above and create a tab. When the chart for each tab appears, immediately begin the audio narrative below in the notes section:

CBA Organizational Matrix

	Study Director	Director's chain of command	Organization A	Organization B	Contractor A	Contractor B
Adversary expertise			X			
Analytic Team					X	
Bureaucratic advisor		X				
Communicator	X					
Cost estimator					X	
Doctrinal experts						
Area 1				X		
Area 2					X	
Area…						X
Study designer				X		
Study organizer	X					
Policy experts			X			
Technical experts				X		X

Team Selection Exercise

- Insert the CBA Team Selection Exercise here…

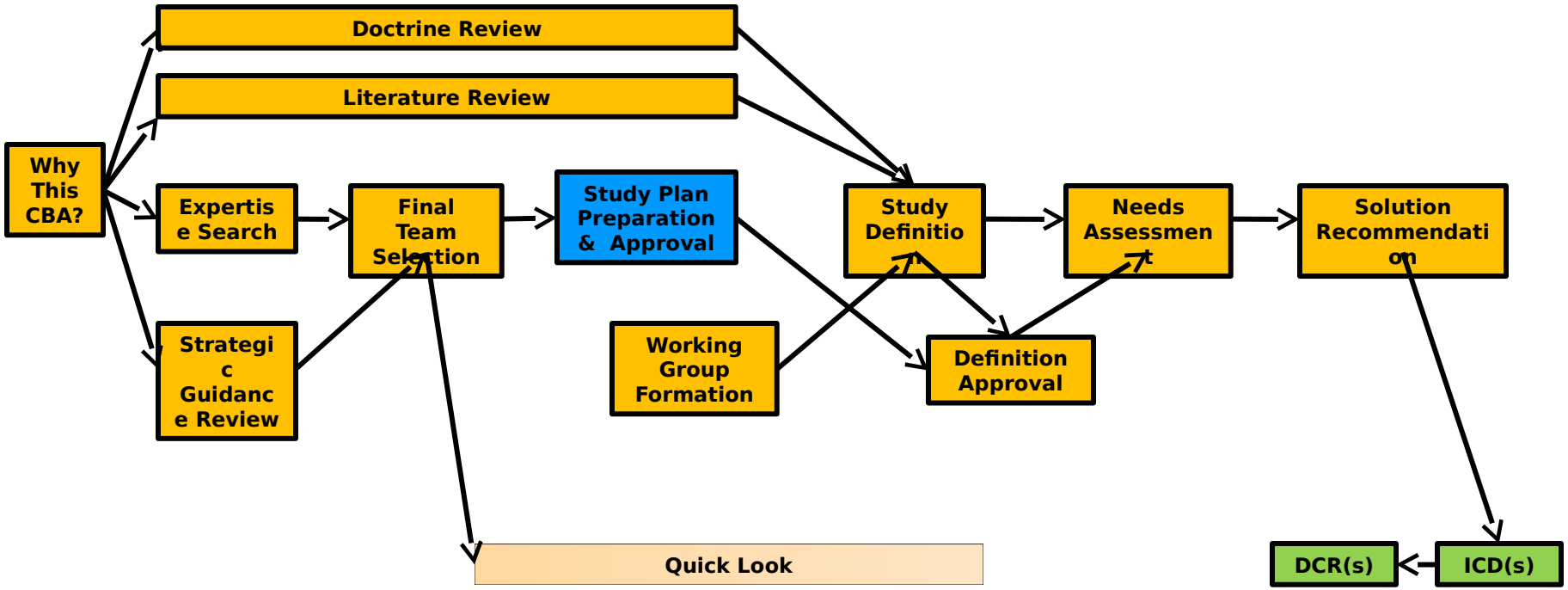
Knowledge Review

- Please select correct answer.
  - Which of the following is strongly recommended during your team-forming process?

A. Submit your organizational matrix to your command chain
B. Designate a deputy team leader
C. Postpone your literature search until the core team in fully formed
D. Use only one person per expertise for the responsibilities outlined in the organizational matrix

Study Plan Preparation and Approval

Concept Preparation (if it was commissioned) or Review of Available CONOPs



Impediments Faced by Previous CBAs

- Concept Delays
- False Starts
- Staffing Results Through JCIDS
- Command Redirection
- Access and Clearance Problems

Note: Make each bullet above a tab that corresponds with the audio narrative below:

Knowledge Review

- Please select correct answer.
  - Which of the following are impediments previous CBAs have faced?
    a. Changes imposed by the chain of command
    b. Security clearances
    c. Lengthy staffing
    d. All of the above

The CBA Study Plan Scope

- "When the JROC directs the initiation of a CBA, the CBA study plan will be included as a step *prior to the functional area analysis.* The study plan will include specific areas the CBA will examine. The study plan *will scope the CBA*, clearly identify the focus of the assessment, identify which of the four Capability-Based Planning challenges (traditional, irregular, disruptive, catastrophic) it will address, and demonstrate that the assessment will address the tasking authority's request…This study plan also makes clear what the CBA will not address. The CBA needs to be thorough yet *not subject to mission creep*." [JROCM 062-06, 2006]

The Scope of the CBA

- Scenarios considered (conditions)
- Functions considered (ways)
- Types of solutions considered (means)

- Note: take each bullet above and create a tab. When the chart for each tab appears, immediately begin the audio narrative below in the notes section:

The Scope of the CBA (continued)

- Capabilities desired (effects)
- Concept of operation (tasks)
- Measures of effectiveness (standards)

- Note: take each bullet above and create a tab. When the chart for each tab appears, immediately begin the audio narrative below in the notes section:

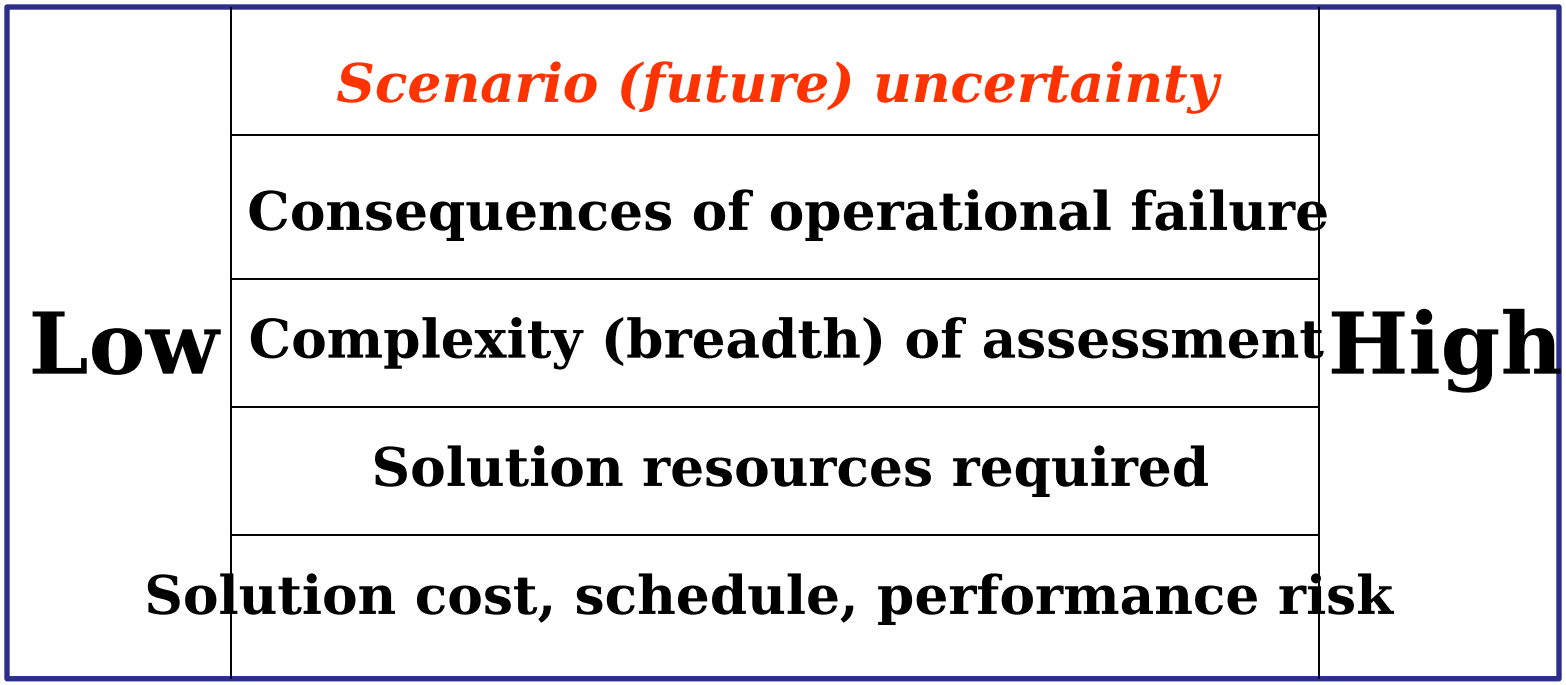
The Scope of the CBA (continued)

- "The JROC preference is to *avoid high rigor* and time-consuming detail in the CBA, and *concentrate on whether to recommend action.* CBAs that are tightly focused on recapitalization or replacement actions should take no more than 90 days, while more complex CBAs dealing with large uncertainties should take no more than 180 days. "
  - Add link to this document: JCIDS Manual, February 2009, Updated 31 Jul 2009, p. A-1

Knowledge Review

- The factor(s) that the scope of a CBA addresses is/are:
  a. **Scenarios**
  b. Logistical support
  c. a. and b. above
  d. Neither a. nor b. above

CBA Study Rigor



Low Rigor → **High Rigo**

Note: Start audio narrative below immediately when chart appears:

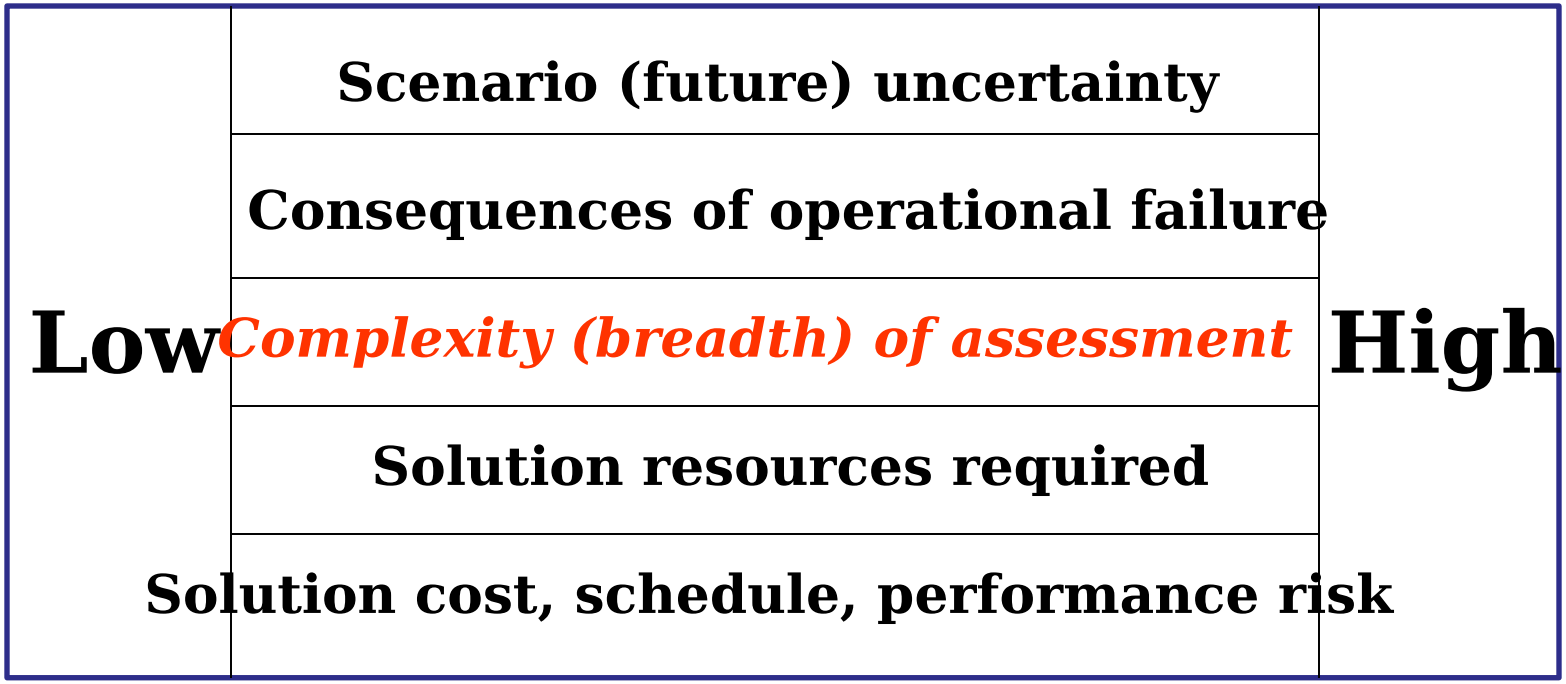
CBA Study Rigor

Low		High
	Scenario (future) uncertainty	
	Consequences of operational failure	
	Complexity (breadth) of assessment	
	Solution resources required	
	Solution cost, schedule, performance risk	

Low Rigor → **High Rigo**

Note: Highlight each middle section above that corresponds with the audio narrative below:

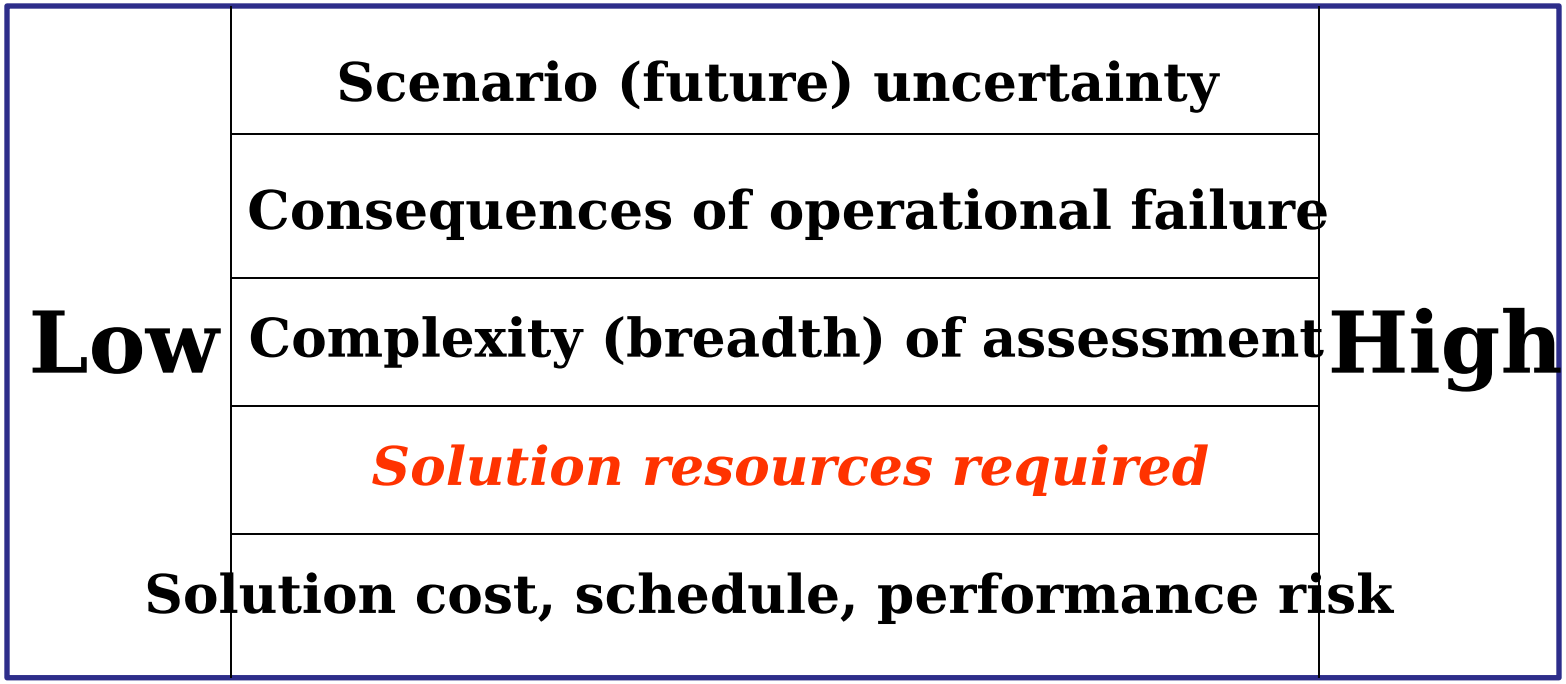
CBA Study Rigor



Low Rigor → **High Rigo**

Note: Highlight each middle section that corresponds with the audio narrative below:

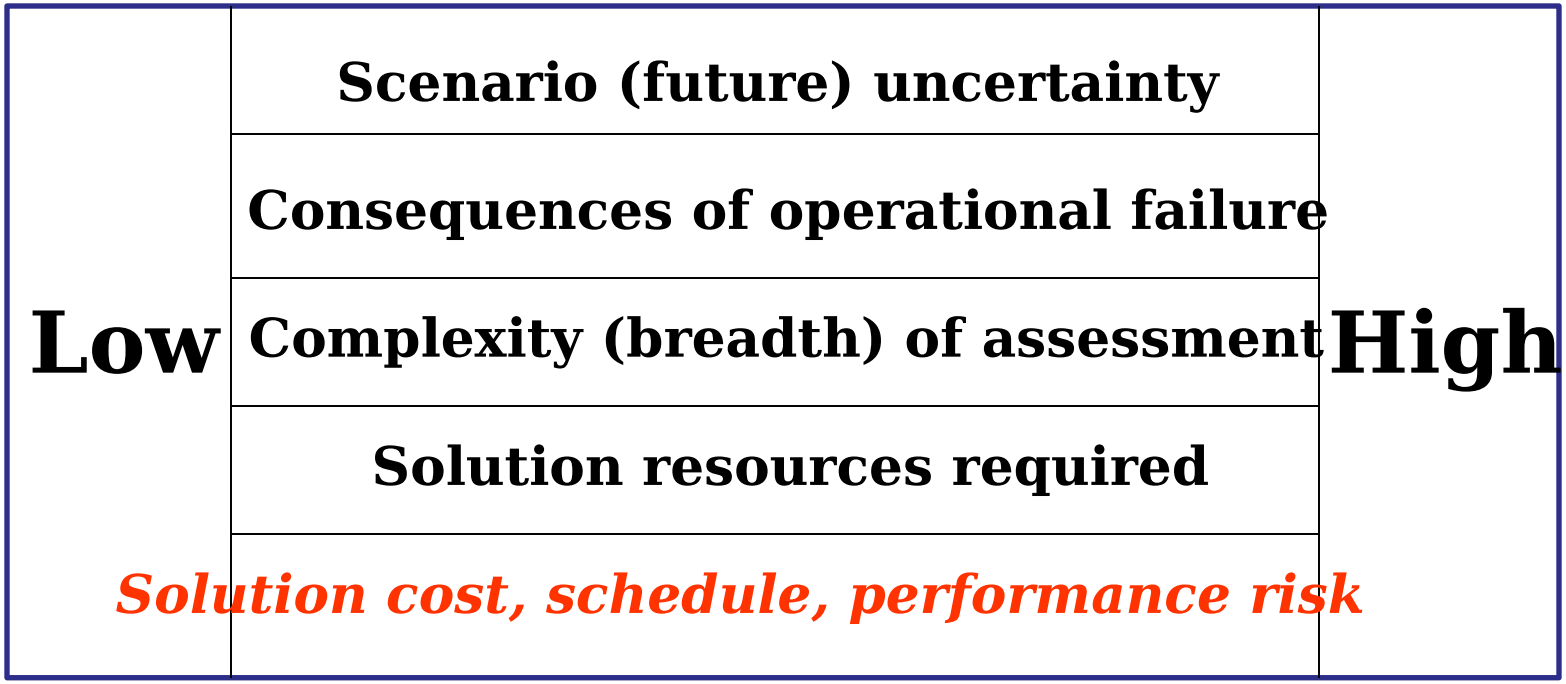
CBA Study Rigor



Low Rigor → **High Rigo**

Note: Highlight each middle section above that corresponds with the audio narrative below:

CBA Study Rigor



Low Rigor → **High Rigo**

Note: Highlight each middle section that corresponds with the audio narrative below:

Knowledge Review

- Please select correct answer.
- If the consequences of operational failure is low, the rigor of the CBA analysis is:
  a. High
  b. Dependant on the nature of the other four factors
  c. Determined by the Study Plan
  d. Low

The CBA Study Plan Format

- No specified format – however shorter is better (15 pages or less)
- The following is a composite of past CBA Study Plans (useful as a starting point…)
  - References
  - Purpose
  - Background and Guidance
  - Objectives
  - Scope
  - Methodology
  - Organization and Governance
  - Projected Schedule
  - Responsibilities

Note: make each sub bullet above a tab and use the corresponding audio narrative below.

Also, insert link to example CBA Study Plan here

The CBA Study Plan Format (continued)

- Methodology Approaches
- Measures of Effectiveness (MOEs)
- Technological and Policy Opportunities

Note: make each sub bullet above a tab and use the corresponding audio narrative below

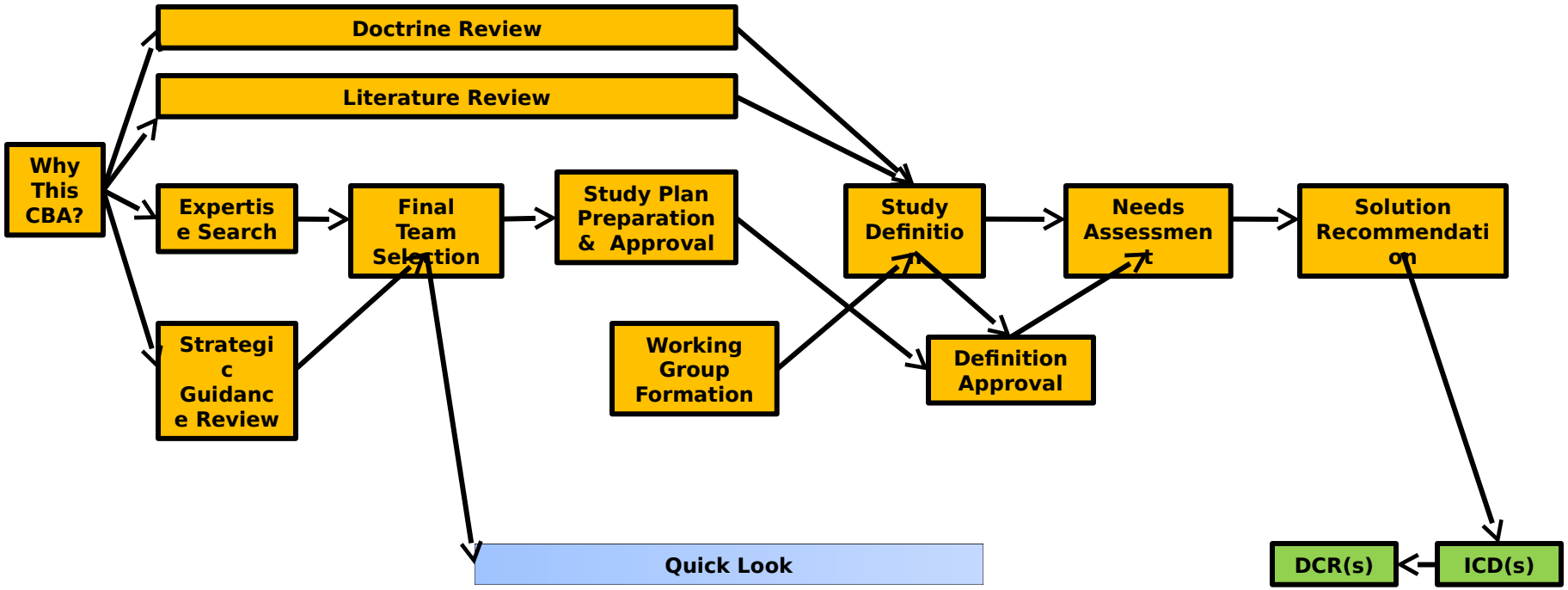
Note: insert link to actual CBA Study Plan when available.

Knowledge Review

- Please select correct answer.
  - The CBA Study Plan is not specified by CJCSI 3170.01G .
    a. **True**
    b. False

The Quick Look Pilot Study

Concept Preparation (if it was commissioned) or Review of Available CONOPs



The CBA “Quick Look” Pilot Study

- **Benefits:** creates analytical bounds on:
  - Current doctrinal CONOPS
  - Options open to the enemy
  - Investments in the capability areas
  - Alternate CONOPS and operating policies

  - Note: make each sub bullet above a tab and use the corresponding audio narrative below.

The CBA “Quick Look” Pilot Study

- **Products & Timing:**
  - Briefing to superiors that offers initial answers to the questions that inevitably follow.
  - Begin Quick Look Pilot Study ASAP with your Core Team members
    - *‘The management question, therefore, is not whether to build a pilot system and throw it away. You will do that. The only question is whether to plan in advance to build a throwaway, or to promise to deliver the throwaway to customers. Seen this way, the answer is much clearer… Hence plan to throw one away; you will, anyhow.”*

      Source: Brooks, Frederick P. Jr., The Mythical Man-Month: Essays on Software Engineering, Addison-Wesley, 1995, 116]

Knowledge Review

- Please select correct answer.
  - Which of the following is a recommended reason to perform a “Quick Look” pilot study:

A. Creates bounds on CONOPS
B. Creates bounds on material solutions
C. Creates bounds on Core Team selection
D. Creates bounds on Working Group Team selection

Reflective Questions

- You've been handed a memo instructing you to conduct a CBA addressing gaps on insurgent detection in a crowded urban environment. You've already started some of your document reviews.
- Using the organizational matrix on slide #8 as a reminder, who immediately comes to your mind that could act as members of your Core Team? Your Working Group Team? If there are gaps in filling out your Core Team, where might you look for members that could fulfill that missing function? What specific additional expertise may be needed to effectively conduct your CBA?

Lesson #3 Summary

- Insert link to PDF Lesson #3 Summary document here

Lesson #3 Test Questions – ELO #1

1. Which of the following are important types of CBA expertise?
   a. Analytical ability
   b. Adversary knowledge
   c. Doctrinal knowledge
   d. All of the above
2. During the literature search, if a study is deemed successful, you are encouraged to:
   a. Find out who made it a success
   b. Use it in its entirety
   c. Apply any negative results to your assessment
   d. Ignore the final results or conclusions

Lesson #3 Test Questions – ELO #1

3. Parceling out work to individual team members is a more effective analytical approach than an integrated team approach.
   a. True
   b. False

4. Using contractors is easier than using FFRDCs due to funding streamlining.
   a. True
   b. False

Lesson #3 Test Questions – ELO #2

1. What is the recommended order of starting a CBA?
   a. Literature search, build the Study Plan, build Core Team
   b. Doctrinal review, build the Study Plan, build Core Team
   c. Strategic review, expertise search, literature review
   d. Expertise search, build Core Team, build Study Plan
2. The team that comprises various members that work and report your CBA progress is the:
   a. Technical Advisor Team
   b. Advisory Group Team
   c. Core Team
   d. Working Group Team

Lesson #3 Test Questions – ELO #2

3. You are advised to form the Core and Working Group Teams at the same time.
   a. True
   b. False

4. Which team answers to the CBA team leader directly?
   a. The Core Team
   b. The Working Group Team
   c. Both a. and b.
   d. Neither a. nor b.

Lesson #3 Test Questions – ELO #3

1. A common delay that has hampered the conduct of previous CBAs is:
   a. Wrong Core Team expertise
   b. Improper scoping of the effort
   c. Improper study documentation
   d. Concept approval that precedes analysis
2. How do staffing tasks inhibit the progress of CBAs?
   a. Pre-briefings and modifications
   b. Numerous levels to brief
   c. FCB, JCB, and JROC approval cycles
   d. All of the above

Lesson #3 Test Questions – ELO #3

3. Difficulties getting access to higher classification information has not been a significant impediment to previous CBAs.
   a. True
   b. False

4. Which of the following have proven to be significant impediments to CBAs?
   a. Command redirection
   b. Staffing
   c. a. and b. above
   d. Neither a. nor b. above

Lesson #3 Test Questions – ELO #4

1. Which of the following is not part of the scope of the CBA?
   a. Funding
   b. Conditions
   c. Standards
   d. Effects
2. The following are contained in the Methodology section of the CBA Study Plan:
   a. Methodology constraints
   b. Measures of effectiveness
   c. Technological constraints
   d. Policy constraints

Lesson #3 Test Questions – ELO #4

3. According to JROCM 062-06, which of the following is/are elements of the four challenges for Capability-Based Planning (CBP):
   a. Disruptive
   b. Catastrophic
   c. Both a. and b. above
   d. Neither a. nor b. above
4. CBAs that are tightly focused on recapitalization or replacement actions should take no more than:
   a. 30 days
   b. 60 days
   c. 90 days
   d. 180 days

Lesson #3 Test Questions – ELO #5

3. When the scenario certainty is high, this tends to _____ the study's rigor.
   a. Increase
   b. Deepen
   c. Decrease
   d. Not affect
4. The JROC preference for CBAs is
   a. Low rigor and emphasis on low detail
   b. Low rigor and emphasis on recommendations
   c. High rigor and emphasis on recommendations
   d. Low rigor and emphasis on proper staffing

Lesson #3 Test Questions – ELO #5

3. When the solution cost risk is low, what high risk elements would call for higher rigor?
   a. Performance
   b. Schedule
   c. Both a. and b. above
   d. Neither a. nor b. above
4. If the solution resources required is low, this tends to _____ the rigor.
   a. Not affect
   b. Decrease
   c. Increase
   d. None of the above

Lesson #3 Test Questions – ELO #6

1. CBA Study Plan objectives, scope, methodology and schedule are specifically called out by JCIDS.
   a. True
   b. False
2. The recommended length of the CBA Study Plan is 15 pages or more.
   a. True
   b. False

Lesson #3 Test Questions – ELO #6

1. The recommended section, Organization and Governance, is intended to address:
   a. How the Core Team interacts
   b. Website and coordination procedures
   c. Both a. and b. above
   d. Neither a. nor b. above
2. The recommended section, Responsibilities, is intended to pertain to:
   a. The Core Team Leader
   b. The Core Team
   c. The Working Group
   d. Other government organizations

Lesson #3 Test Questions – ELO #7

1. One reason to conduct a “Quick Look” Pilot Study is to understand where to concentrate resource expenditure.
   a. **True**
   b. False
2. JCIDS requires the integration of the results of the “Quick Look” Pilot Study into the CBA’s recommendations to the JROC.
   a. True
   b. **False**

Lesson #3 Test Questions – ELO #7

3. The benefits of a “Quick Look” Pilot Study is to constrain:
   a. Investment in capability areas
   b. Doctrinal CONOPS
   c. Alternative CONOPS
   d. All of the above

4. Determining “how good are we now” and “what updates are possible” are examples that address the bounding of:
   a. Investment in capability areas
   b. Current doctrinal CONOPS
   c. Options open to the enemy
   d. Alternative technological options